## National **Charter School Resource** Center



at LEARNING POINT ASSOCIATES

# Construction Planning and Management:

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IFF

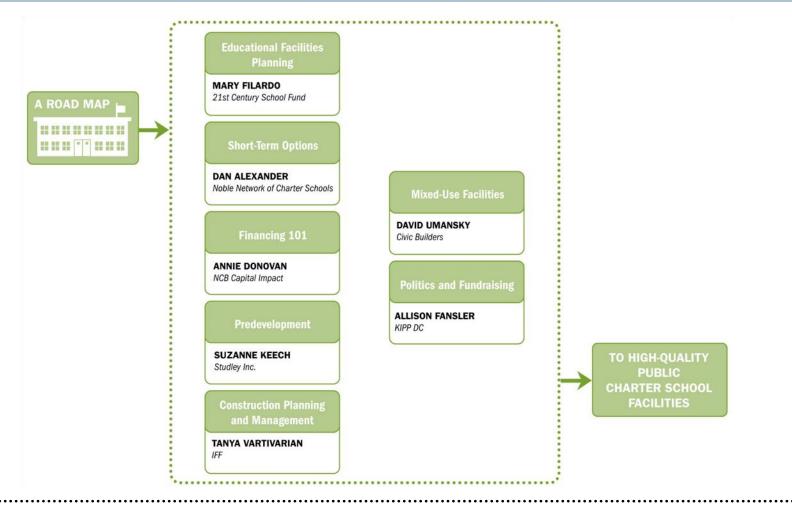
June 2010







#### **Facilities Process Overview**





#### **About IFF**

- ➤ A nonprofit community development financial institution founded in 1988, with more than \$165 million in assets
- > Serves Illinois, Indiana, Iowa, Missouri, and Wisconsin.
- Provides affordable financing and real estate resources to nonprofit agencies serving low-income communities:
  - 789 loans totaling \$278 million
  - Real estate consulting and development: 325 projects and 1.6 million square feet developed
- Has deep experience with charter schools:
  - 78 loans totaling \$42 million, creating more than 17,900 new student slots
  - Credit enhancement grants totaling \$10.7 million



## Tell Me About Your Facilities Experience

- How many of you have undertaken or are undergoing a facilities project?
- How many are considering one?
- What do you think is the biggest challenge in undertaking a facilities project?
- ➤ What is the one thing you would like to get out of this workshop?



## **Case Study**

Charles H. Shaw Technology and Learning Center, Chicago

Before After







#### Case Study cont.

Charles H. Shaw Technology and Learning Center, Chicago







## Case Study cont.

Charles H. Shaw Technology and Learning Center, Chicago Before After



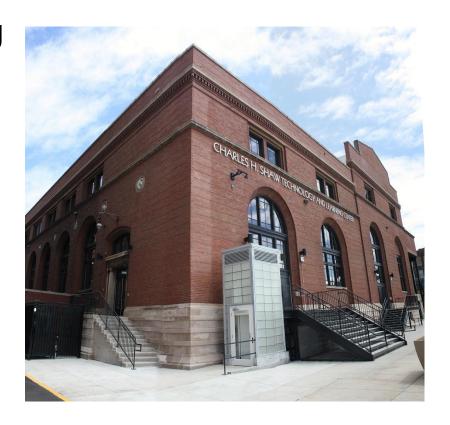




#### **Case Study**

#### Charles H. Shaw Technology and Learning Center, Chicago

- ➤ Total Costs: \$40 million
- ➤ Square Feet: 95,000
- ➤ Students Served: 450
- ➤ Opened: August 2009





#### **Case Study**

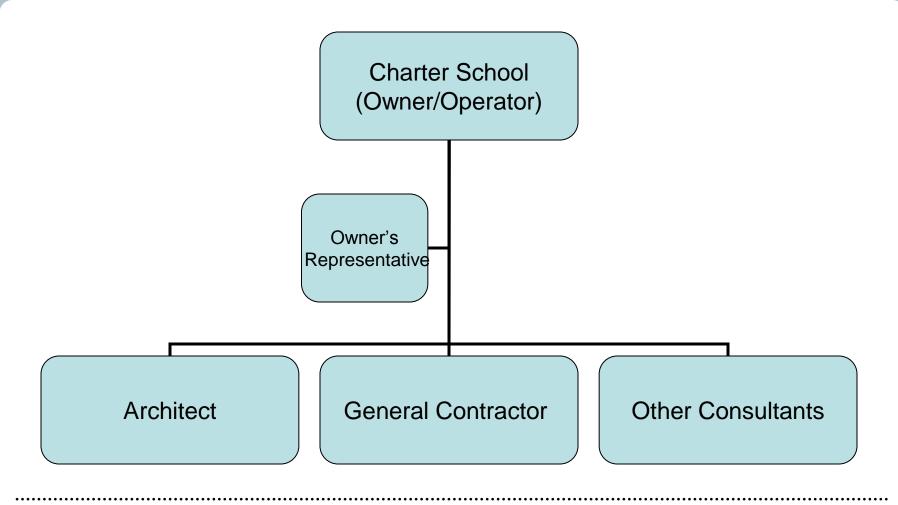
#### Noble Network of Charter Schools Rowe-Clark Math and Science Academy, Chicago

- ➤ Total Costs: \$8.7 million
- ➤ Square Feet: 42,000
- ➤ Students Served: 530
- ➤ Opened: August 2007





#### **Overview of Team**



- Charter School (Owner/Operator)
  - Provides input on and approves program and design.
  - Approves project budget and secures financing.
  - Provides necessary approvals.
  - Coordinates owner items during construction (IT, security, phone system).



- Owner's Representative
  - Serves as school's "eyes and ears" & advocate.
  - Manages design and construction team.
  - Assists school with securing financing.
  - Provides technical guidance and advice to the school.
  - Conducts troubleshooting.
  - Monitors project budget, schedule, and quality.



#### > Architect

- Designs building and layout reflective of school's needs.
- Designs to a budget.
- Prepares design and construction documents.
- Assists with permitting and zoning.
- Monitors adherence to design and oversees punch list.



- ➤ General Contractor
  - Provides on-site management of entire construction process.
  - Performs work and/or hires and oversees subcontractors.



- ➤ Other Consultants
  - Environmental consultant
  - Leadership in Energy and Environmental Design (LEED) accredited professional
  - Commissioning agent



#### How to Hire the "A-Team"

- > Ensure that they have relevant experience:
  - Experience with schools and nonprofits
  - Similar project type, size, scale and geography
- Conduct in-person interviews.
  - Meet the staff who will work on your project
- Call references and tour existing sites.
- Examine current workload and capacity.
- Check insurance, bonding capacity, pending lawsuits, liens, and other information.
- Have a good contract between school and team members. (Use an attorney.)



### It All Starts With Good Design

- Facility parameters/space needs
  - Number and type of rooms, amenities, green design goals (integrated design process), location.
  - Get input from key staff
- Progression of drawings
  - Schematic drawings (basic floor layout)
  - Design development
  - Construction drawings
- Review and sign-off on each set of drawings
  - Obtain cost estimates as drawings progress



## **Sample Space Needs**

Classrooms	Class- rooms	Students Per Class	SF Per Student	Total SF Per Room	Total SF
Classrooms	14	25	35	875	12,250
Science Lab	4	25	25	625	2,500
Fitness Room	1	25	30	750	750
Music Room	1	25	30	750	750
<b>CLASSROOM SPACE</b>	20				16,250
Administration		Rooms	Employee s	Total SF Per Room	Total SF
Reception Area/Main Entrance		1	1	450	450
Adminstrative Space		1	8	750	750
ADMINISTRATION SUBTOTAL		2	9		1,200
Additional Program Space		Rooms	SF per Room	Total SF	
Cafeteria/Recreational Space			1	2,700	2,700
Warming Kitchen			1	500	500
Boys and Girls Showers			2	600	1,200
Storage			1	100	100
Toilet Rooms			4	300	1,200
Work Room			1	100	100
Teacher Prep Area			1	250	250
Janitor's Closet			1	50	50
Maintenance/Utility			1	150	150
I/T Server Room			1	80	80
<b>ADDITIONAL PROGRA</b>	SUBTOTAL	14		6,330	
Circulation			25%		5,945
GRAND TOTAL					29,725



## **Sample Schematic Drawings**





## Select General Contractor and Contract Type

- Determine bidding process and contract type.
  - Use competitive bidding or choose a general contractor early on (or could be a combination).
- Prepare bid form.
  - Adhere to project goals (schedule, hiring requirements).
  - Require detailed cost breakdown, unit costs, fees.
- Evaluate bids carefully.
  - Lowest bid is not always the best bid.
  - Conduct "apples-to-apples" comparison.
  - Pricing usually good for 90 days at most.



#### Financing and Construction Escrow

- > Have letters of commitment from all funders.
- Understand funder's requirements for closing:
  - Permit, construction documents, contracts, bids
- Close on financing before construction starts.
- Always have project contingency.
- Establish payout process.
  - Create escrow account with title company.
  - Ensure a process for review of applications for payment, including lien waivers and other documentation.
  - Retain percentage of contractor's fee until completion.



## The Expected (and Unexpected) During Construction

- Monitoring construction and schedule
  - Daily field reports prepared by general contractor
  - On-site construction meetings (usually weekly)
  - Pay application meetings (usually monthly)
- Change orders and scope changes
  - Often due to unforeseen site conditions, mistakes in documents, and/or misinterpretation of drawings.
  - Due to owner-initiated changes
  - Carefully review and negotiate pricing.
  - Understand impact on schedule.



#### **Project Closeout**

- Substantial completion / occupancy
  - Specify date in general contractor (GC) contract (may not be the same as project completion)
  - Allow 1 to 2 months for move in after Certificate of Occupancy (C of O).
  - Make sure GC schedules all necessary inspections.
  - Obtain necessary business licenses.
- > Punch list
  - Comprehensive final inspection with architect and owner's representative.
  - GC's retained fee can be used as leverage if needed.



#### **Project Closeout**

- Obtain as-built drawings.
- Obtain warranties, guarantees, manuals.
- Conduct equipment and systems training.
- Ensure that all punch list items are complete.
- Make final payments to vendors and close out escrow.



## Q & A



#### National Charter School

#### **Resource** Center

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